THE COLLATERAL TRUST MORTGAGE IN RAILWAY FINANCE.

ONE of the most important inventions of modern railway finance is the collateral trust mortgage. Devised as a means of evading a statutory limitation to a railroad company's activities, it has become a powerful and, indeed, indispensable instrument for building up great railway systems. During the last twenty-six years there have been about ninety issues of collateral trust bonds, ranging in amount from $700,000 to $75,000,000 each, put forth for a variety of purposes, and covering from sixty miles to four thousand miles in a single issue, while a large number of mortgages bearing other names have collateral trust features.

The ordinary railroad mortgage is a direct lien upon the road-bed, track, right-of-way, franchises, real estate, and other tangible property of the corporation. A collateral trust mortgage is a mortgage not upon tangible property or franchises, but upon other mortgage bonds which are direct liens upon property, or upon corporate shares which represent ownership in such property and franchises. Thus the collateral trust bonds issued by the Chicago, Rock Island & Pacific Railroad Company in 1903 are secured by a mortgage upon nearly $28,000,000 of the common stock of the St. Louis & San Francisco Railroad Company, this stock being held in trust in the interests of the bondholders by a certain trust company. The collateral trust bonds issued by the Illinois Central Railroad Company in 1892 are secured by a mortgage upon the first and second mortgage and income bonds of the Louisville, New Orleans & Texas Railroad Company, similarly held in trust.

An account of the origin of the collateral trust mortgage is of interest because it furnishes an illustration of corporate ingenuity in the matter of doing illegal things in a legal way. The construction of the Union Pacific Railroad, among others, was subsidized by the United States Government, which took a second lien upon all that company's property to secure its loan. In 1873, in order to prevent the impairment of the government's lien, Congress passed a law prohibiting the Union Pacific from increasing the bonded debt of the property subject to this lien. Now railroads are built largely out of the proceeds of bond sales. The result of this law was that the Union Pacific could build no branch lines or extensions under its charter. If built at all, these branches must be built under separate charters and legally distinct companies. But these companies must be controlled by the Union Pacific, or they might fall into the hands of its competitors. Further, the bonds of small subsidiary companies could not be sold directly to the public unless their interest and principal were guaranteed by the parent company, and this the latter could not legally do because that would be placing at least a contingent fixed charge upon its own earnings.

This situation resulted in the Union Pacific 6 per cent. collateral trust bonds of 1879. Legally distinct companies were organized and chartered to build the desired branches. The Union Pacific advanced the funds with which to construct these lines out of its current earnings, and received in compensation the capital stock and first mortgage 7 per cent. bonds of the smaller companies, which thus became subsidiary. To reimburse its treasury for these advances, the Union Pacific mortgaged these first mortgage bonds, and issued and sold about $7,000,000 of collateral trust bonds against them. The interest on this collateral was more than sufficient to pay the interest on the 6 per cent. bonds, so that, as long as the subsidiary companies

did not default in their interest payments, the charges against the revenues of the parent company were not increased, while at the same time it was getting the benefit of a profitable interchange of traffic with those companies. Thus did the Union Pacific accomplish the feat of constructing, eventually without cost to itself, branch lines which were directly under its control, and at the same time of living up to the letter of the national statute.

Three years later, when the Union Pacific created a second collateral trust issue for a similar purpose, suit was brought by a stockholder to prevent the issuance of the bonds, upon the ground that this really increased the funded burden of the Union Pacific property, and, therefore, was in violation of the national statute. It was shown, however, that the plaintiff, although a stockholder at a time previous to the date of this bond issue, had sold his stock and had not again become a shareholder until after the new bond issue had been authorized. The court decided that he had no right of action, so that the real point of the case was never judicially considered.

The idea of the collateral trust mortgage was probably suggested by the practice, long current among stock brokers, business men generally, and railway companies as well, of borrowing upon corporate securities as collateral. Such debts, in the form of ordinary promissory notes, ran for short periods of thirty or sixty days only. The question is naturally suggested, If such collateral is adequate security for ordinary commercial paper, why would it not also be adequate security for long-time loans?

The collateral trust mortgage soon became popular and was used for a variety of purposes. The most important of these have been to fund floating debts, acquire control of connecting railroad lines, and to finance new construction. Out of seventy collateral trust issues about which

inquiry has been made for the present investigation, eleven have been made for the first of these purposes,—funding troublesome floating debts. Some of these have been due to the misfortunes of the railroad company, some to new construction for which funded obligations had not yet been created, some to both. Thus poor crops in Kansas and Nebraska in 1886 and 1887, strikes and general labor agitation, caused the Atchison, Topeka & Santa Fé to incur a floating debt of $5,000,000 in 1888. A strike, a flood, assisted by a general business depression, caused the Baltimore & Ohio Southwestern a floating debt of over $1,000,000 in 1897. The Richmond & West Point Terminal Railway and Warehouse Company repeatedly piled up floating debts because of the general unprogressiveness and lack of efficiency in the management of the railways which it controlled. Illustrations of floating debts due to construction were those of the Central Railroad and Banking Company of Georgia in 1887, and of the Missouri Pacific prior to 1895. The former piled up a 6 per cent. floating debt of $1,050,000 in building roads in South Carolina, and funded this into a 5 per cent. collateral trust mortgage. The Missouri Pacific had been building railroads with materials bought on account or on commercial paper. All of the floating debt thus created had been bought up by Jay Gould, Russell Sage, and other directors, and held by them subject to call. This debt resulted in the Gold Funding Notes of 1895.

The manner in which this method of funding floating debts becomes available may be illustrated by the case of the Richmond & West Point Terminal Company in 1883. That company had acquired control of a network of railways in Virginia, Tennessee, Georgia, and the Carolinas, by purchasing their capital stock and bonds. Almost invariably these had been obtained in exchange for

its own capital stock, so that these securities of subsidiary companies lay in the Terminal Company's treasury, unencumbered by any mortgage. When the company found itself burdened with a large floating debt in 1883, it relieved itself by pledging a great mass of these shares and bonds as security for its 6 per cent. two-year collateral trust notes.

The old Wabash, St. Louis & Pacific funded a similar floating debt in 1883. That company had been seized with the mania for expansion. Organized in 1879, it had in three years' time increased its mileage from 1,578 to 3,518 miles, its debt from thirty-five to seventy millions, and had accomplished this partly by construction under subsidiary companies, mostly by annexing all the odds and ends of railway lines lying loose in its vicinity. In the same process it had collected a large and miscellaneous mass of railway securities in its treasury. Aided by destructive washouts, poor crops, and the poor condition of the roads acquired, it had piled up a floating debt of over $5,000,000. About $18,000,000 worth of these stocks and bonds were bundled together under a collateral trust mortgage and $10,000,000 of 6 per cent. notes issued against them, part of which was to provide for this floating debt and part to pay off certain car trust certificates which were to mature during the ensuing nine years.

These bonds of the Wabash were to run thirty years. Usually, however, the securities issued to take up a floating debt have a period of only three or four years, and are called collateral trust notes. The Richmond & West Point Terminal notes of 1883 matured in 1885, and were converted into another collateral trust issue bearing 7 per cent., and maturing in 1887; the Atchison notes of 1888 were to run only three years; the Union Pacific Collateral Trust Notes of 1891, three years; those of the Northern Pacific of 1893, five years.

The reason for the temporary nature of these issues is apparent. They are created when the railway company is in financial distress, when its credit is poorest. Consequently, these notes must either bear high interest rates or sell at a large discount, or both. The first collateral trust loan of the Richmond & West Point Terminal in 1883 bore 6 per cent., and was negotiated at 90, representing a cost of 11 per cent. per annum. Its successor in 1885 bore 7 per cent. The Atchison notes of 1888 bore 6 per cent., and netted the company 97½. The Union Pacific notes of 1891 bore 6 per cent., and were taken at 92½, representing a cost of 8 per cent. per annum. The railway company feels that by tiding over the temporarily unfavorable condition of its finances it can place its long-time securities at lower interest rates. Hence these short-time notes.

So much for the floating debt as leading to this form of security. A more important purpose of the collateral trust mortgage is to serve as a means of acquiring control of connecting lines. There are three ways in which this may be accomplished, namely: (1) one railroad company may purchase a controlling interest in the securities of a second company, paying for them in cash, and reimburse itself by mortgaging the securities thus purchased and selling collateral trust bonds against them; (2) the purchasing company may exchange its collateral trust bonds directly for the desired securities of the second company, and deposit these securities obtained in the exchange under the collateral trust mortgage; (3) the trustee of the mortgage may sell the collateral trust bonds on the market, and with the proceeds purchase the desired securities of the connecting lines, and deposit them under the mortgage.

The first method, the cash purchase, will usually be followed when there is reason for a quick purchase of the

desired securities. Thus, during the panic of 1893, the preferred and common stock, the second mortgage and equipment trust bonds of the Chesapeake, Ohio & Southwestern took a sudden and large drop. The Illinois Central snatched them up at their low prices, at the same time buying that company's floating debt and overdue interest coupons, and thus obtaining control. This move gave the Illinois Central an outlet from Memphis toward the North-west for the traffic coming up over its Yazoo & Mississippi Valley Division, and also connected that division of its system with the main line at Fulton, Kentucky. The Illinois Central reimbursed itself for these cash appropriations by selling an issue of collateral trust bonds secured by a mortgage upon the Chesapeake, Ohio & Southwestern securities.

Again, in 1892, the Illinois Central purchased $35,236,000 of the mortgage and income bonds of the Louisville, New Orleans & Texas Railroad, which paralleled its Yazoo & Mississippi Valley Division. By the terms of the agreement it was required to pay $5,000,000 of the purchase price in cash. To pay the remainder of the purchase price of $25,000,000 and to reimburse itself for this cash payment, the Illinois Central mortgaged the securities purchased, and issued $25,000,000 of collateral trust bonds against them.

In other cases the companies owning the desired connecting lines may have only a small amount of securities outstanding, so that these may be purchased for cash without inconveniently draining the purchasing company's treasury. The Reading Company in 1899 purchased most of the $1,500,000 capital stock of the Wilmington & Northern at from $40 to $50 per share ($50 par value), and reimbursed itself in the following year by an issue of $1,300,000 of 4 per cent. collateral trust bonds.

A more common practice in acquiring control of con-

necting lines is to exchange the collateral trust bonds directly for the stocks and bonds which are desired, and which become the security of the collateral trust bonds. This exchange is made at a fixed ratio stated in terms of the par value of the two sets of securities, usually offering the holders of the desired securities a little more than the market price of their holdings at the time. Thus, in 1902, the Chicago, Rock Island & Pacific Railroad Company, wishing to acquire the capital stock of the Chicago, Rock Island & Pacific Railway Company, offered the holders of that stock its collateral trust 4 per cent. bonds, together with the common and preferred stock of the Rock Island Company of New Jersey, in the ratio of $100 in bonds, $70 in preferred stock, and $100 in common stock for each $100 of capital stock of the Railway Company. The Railway Company's stock, which had been paying 5 per cent. dividends, had risen in market price from 135 in July, 1901, to 170 in June, 1902, and thence to 200 later in the year. The securities for which these stocks were exchanged guaranteed their holders 4 per cent. on the par value of their investment in the form of interest on the collateral trust bonds, an additional 2.8 per cent. if earned as dividends on the preferred stock, in all a possibility of 6.8 per cent., and gave them a bonus of common stock. Rock Island Company's preferred stock commenced paying 4 per cent. dividends in 1903; but its ability to continue this is contingent upon the old Railway Company's ability to continue paying more than 7 per cent. dividends on its stock, which, in view of the present inferior condition of its property, is improbable.[1]

Again, in 1902, to acquire the stock of the Choctaw, Oklahoma & Gulf Railroad, the Chicago, Rock Island & Pacific Railway Company offered the holders of that stock

[1] Since the above was written, the Rock Island Company has been compelled to reduce the dividend on its preferred stock.

its 4 per cent. collateral trust bonds at the rate of $80 in bonds for each 50-dollar share of Choctaw common, and $60 in bonds for each 50-dollar share of Choctaw preferred. The preferred stock had been paying 5 per cent. dividends since 1898, and the common from 2 to 4 per cent. This was not in itself an attractive offer to the preferred shareholders; but they had either to accept this offer or furnish large amounts of funds for betterments and extensions, besides withstanding the competition of a parallel line which the Rock Island threatened to build if they refused this offer. They accepted.

The third method of purchasing the securities of another railway company is illustrated in the Richmond & West Point Terminal mortgage of 1887. The "Terminal Company," which had hitherto been subsidiary to the Richmond & Danville, wished to acquire the $6,000,000 of First Preferred Stock of the East Tennessee, Virginia & Georgia and a controlling interest in the Richmond & Danville stock, and thus to become the parent company. For this purpose $4,400,000 in cash was required, in addition to 40,000 shares of the "Terminal" Company's stock. To obtain this cash and fund a floating debt, a mortgage for $8,500,000 was placed upon a list of stock and bonds, including the "East Tennessee" and the Richmond & Danville stock about to be purchased, the list amounting to $21,416,000. The collateral trust bonds thus secured were delivered to a syndicate in exchange for the necessary cash funds, the syndicate reimbursing itself from the sale of the bonds. In other cases the trustees of the mortgage sell the bonds, and from the cash proceeds purchase the desired railway securities, and hold them subject to the mortgage.

So much for the methods of purchasing the securities of connecting railroads. Twenty-nine out of about seventy collateral trust issues were created wholly or in part for

this purpose. Other methods of acquiring control of connecting lines are through the lease of their roads, consolidation, and common personal ownership of the stock of the two companies. The lease is the most common. But, if a fixed rental is paid for the leased line, this becomes burdensome to the lessee if the acquired line should prove unprofitable or during times of depression. If the rental be a fixed percentage of the gross or net earnings, thus fluctuating with the prosperity of the leased line, this in practice has been found to discourage improvements by the lessee upon the leased property, because the lessee will not get the whole benefit of such improvements. As a result, many companies are supplementing their leases by purchasing the stock of the leased lines, or are purchasing this stock and cancelling or refusing to renew their leases. The Illinois Central adopted the latter course in dealing with its Iowa lines in 1887. The Mobile & Ohio, in 1900, supplemented its lease of the St. Louis & Cairo Railroad by purchasing that company's stock under a collateral trust mortgage. Very frequently a railway company, after obtaining a controlling interest in the stock of a connecting line, will also lease its road. This enables the parent company to operate the leased road as an integral part of its system.

In "consolidation," as the term is here used, one company loses its identity, its property being sold to the other company in consideration of the assumption of its debts by that company, or distributed to its stockholders, which consist of the parent company. The method of consolidation is rarely followed in practice. It has the advantage of simplifying accounts by avoiding the necessity of keeping a distinct set of accounts for each part of the system. But a connecting line may become a burden instead of a blessing to the system, and under consolidation there is no way in which to remove such a burden except

insolvency and reorganization. Whereas, if control is exercised through stock ownership, the burdensome line may be dropped off by redeeming the collateral trust mortgage and selling the underlying securities.[1] Further, consolidation may lead to legal complications. There is always that danger that the courts will declare the consolidation illegal; and, since a case testing its legality may not come up at once, but several years later, when everything has been adjusted to the new order, it is considered advisable not to resort to this method of control. Finally, in case a consolidation were not declared illegal, there is still grave doubt as to the charter rights of the consolidated company. Thus the present Chicago, Rock Island & Pacific Railway Company was a consolidation of the former Chicago, Rock Island & Pacific Railroad Company, an Illinois company, and the Mississippi & Missouri River Railroad Company, an Iowa corporation. The laws of Illinois forbid a railroad company from purchasing and owning the stock of another corporation, the laws of Iowa permit it. What rights are possessed by the present "Rock Island" Railway Company, which is a corporation under both sets of laws? Does it possess the most liberal privileges conferred by each charter or the least liberal? As a matter of practical policy, the solicitors of the company will claim all the privileges they ever enjoyed under either charter; but there are abundant opportunities for legal complications.

Control through common personal ownership in the stock of two or more railway companies was, until recently, illustrated in the method by which the Vanderbilt system was held together. The parts of this system, including the New York Central, the Lake Shore & Michigan Southern, and the Michigan Central, were operated in harmony

[1] This is not true, however, if the interest on the subsidiary company's bonds or dividends on its stock be guaranteed by the parent company.

because the Vanderbilt family held a controlling interest in the share capital of each company. This has its disadvantage in that the death of a single individual may cause the break-up of the whole railway system. In 1898 and 1900 the New York Central purchased the Vanderbilt holdings in the stock of the other two companies, and as much of the remaining stock as was offered, paying for them in $3\frac{1}{2}$ per cent. collateral trust bonds secured by the stock purchased.

This case illustrates a third purpose for which collateral trust bonds may be issued; namely, to more firmly cement the parts of a railway system together. In this case common personal ownership was converted into corporate ownership. In other cases separate holding companies may be organized to acquire and hold the securities of connecting lines. The old Richmond & West Point Terminal Company, which was organized in the interests of the Richmond & Danville, was an instance of this kind. Or, as in the case of the Erie Railway's purchase of the New York, Susquehanna & Western and several other companies in 1901, the collateral trust mortgage may be the means of converting close but informal working agreements with connecting lines into actual control.

We come now to the most important purpose for which bonds in general have been issued, and the purpose second in importance for which collateral trust bonds have been issued. That purpose is the financing of new construction. The general practice in building extensions and branch lines nowadays is to construct these under separate charters. But, instead of selling the securities of the new railway company upon the market, these securities are issued to the parent company, and the latter places upon the market its own collateral trust bonds secured by a mortgage upon these stocks and bonds of the subsidiary

company. This course secures the necessary construction funds as readily and insures to the parent company the control of the new lines.

In practice this method works itself out in two variations. The parent company either advances the necessary construction funds out of its own treasury in exchange for the securities of the subsidiary company, and later reimburses itself by the sale of collateral trust bonds, or, in advance of construction, it gives its collateral trust bonds to the subsidiary company in exchange for the latter's stock and bonds; and the subsidiary company then obtains the needed construction funds by selling the collateral trust bonds thus received.

The collateral trust mortgage issued by the Union Pacific in 1879, already referred to as probably the earliest issue of the kind, was an instance of the first variation. The $14,376,000 of Trust Five Per Cent. Bonds of the Missouri Pacific Railway in 1887 was another instance, and were secured by the first mortgage bonds of seven subsidiary companies. A similar collateral trust mortgage of 1890 was secured by the bonds of nineteen subsidiary companies which were built in this way. The Illinois Central and the Louisville & Nashville are also among railroad companies which have financed new construction in this way.

This variation has the disadvantage of entailing a considerable drain upon the earnings and working capital of the parent company, perhaps impairing its working efficiency, and especially diverting funds which might have been paid out in dividends to other purposes. And in practice it seems to be less favored than the second variation, namely, the exchange of securities with the subsidiary companies and the sale of the collateral trust bonds in advance of the construction work.

The latter has been a favorite method with the St. Louis & San Francisco, that company having put out four issues

of collateral trust bonds in this way. Other railway companies which have followed this method are the Burlington (1881), the Rock Island (1884), Illinois Central (1886), the Atchison, and the Union Pacific. This method was also followed by the Pennsylvania Company in putting out its Guaranteed Trust Certificates in 1897 and following years. By following this method the drain on the parent company's treasury is reduced to a minimum; namely, the interest upon the bonds issued.

The reasons for financing new construction by means of collateral trust issues are various. To construct new lines under the parent company's charter would often mean that they would automatically become subject to old mortgages. This means that new bonds issued would have a junior lien, and, as the *Commercial and Financial Chronicle* puts it, an investor prefers a first lien upon a specific piece of property to a tenth or twelfth mortgage upon a whole system. If subsidiary companies are organized, these must be controlled either through the lease of their lines or through stock ownership. The first mortgage bonds of the subsidiary companies might be offered directly to the public; but the investor prefers a bond which, in addition to being a first lien upon a specific piece of property, is a direct obligation of the parent company. The collateral trust bond has both of these desirable qualities, and gains additional strength from the fact that frequently the same bond is thus indirectly a first lien, not upon one branch road only, but upon several, thus widening the security. As in insurance, there is safety in numbers.

Again, as already intimated, the control of connecting lines through stock ownership is a possible advantage in that it may enable the latter to rid itself of such lines if they prove unprofitable. Sometimes a subsidiary company can obtain valuable charter privileges. The Rock

Island built the road of the Wisconsin, Minnesota & Pacific under an old charter which exempted its stockholders from the liabilities imposed by the States through which its lines passed.

But the most important reason for constructing additional mileage in this manner consists of the limitations of the parent company's charter privileges. In the first place, a railway company's charter will pretty definitely fix the location and length of the road which may be constructed by it. Thus the Illinois Central's charter empowered it to construct a railroad from Cairo, Illinois, through the central part of the State, to the north-west angle via Galena, and a branch from Centralia to Chicago. If that company wished to construct other mileage within the State, it might be enabled to do this through an amendment to its charter; but in these days of hostility toward corporations it might have to surrender some other valuable charter privilege in exchange for the desired amendment. Further, the powers granted to a railway company in its charter hold only within the boundaries of its birth State; and, if it wishes to push its lines into other States, as all great railway systems do, these lines must be built under separate charters obtained under the laws of the States in which they lie. Hence a great railway system must consist of the lines of a number of smaller or of larger companies all of which are controlled in some way by one great "parent" company. As shown before, where these subsidiary companies sell bonds,—and they usually do,—these bonds will command better prices if they are represented in the market by the parent company's collateral trust bonds.

The foregoing three purposes—namely, funding floating debts, purchasing control over connecting lines, and financing new construction—are the principal purposes

for which collateral trust mortgages have been created. Of these, the last two, which together represent the building and development of railway systems, are *par excellence* the purposes of the collateral trust mortgage. Fifty out of about seventy such mortgages have been created, wholly or in part, for one of these two purposes. The funding of floating debts comes next with eleven such issues to its credit. A few of the more important minor purposes are illustrated in the following paragraphs.

One such purpose of the collateral trust mortgage is to market the companies' securities on more favorable terms than could be obtained otherwise, either by postponing the sale of long-term bonds until market conditions become more favorable or by combining a number of different bond issues and strengthening their security, to give strength to the combination. In the first case the new issue usually takes the form of collateral trust notes which bear a higher rate of interest than the underlying securities and are exceeded by them in par value. Thus the Baltimore & Ohio Southwestern had sustained during 1896–97 a series of disasters which impaired its earnings, so that its First Consolidated 4½ per cent. bonds had declined from 79 to 60. Being in need of funds with which to repair the damages to its track, that company deposited a number of these 4½ per cent. bonds as security for $675,000 of notes which were turned over to a syndicate in exchange for the needed funds.

On the border between this and the next case are the several collateral trust issues put out by the Seaboard Air-Line Railway Company between 1900 and 1903. The Seaboard Air-Line Railway Company had authorized in 1900 a $75,000,000 issue of 4 per cent. bonds which were a first lien on 350 miles of railway, and a direct mortgage on 1,010 miles of other road, subject to outstanding prior lien bonds amounting to $12,748,000, and was a consoli-

dated lien on the remaining mileage of the Seaboard system. The security was not strong enough to sell the bonds. Consequently, as funds were needed, three successive collateral trust issues were substituted. In each of these there was deposited an amount of the unsalable "First Fours," just double the amount of the collateral trust notes or bonds authorized. Two of these collateral trust issues bore 5 per cent. and one 6 per cent. as compared with the rate of 4 per cent. on the underlying bonds. The collateral trust bonds sold at from 100 to 105 as compared with a price of 82 to 90 on the underlying bonds. The Chicago & Alton Railway Company did a similar thing in 1902, issuing $5,000,000 of 4 per cent. notes against $7,000,000 of 3 per cent. Refunding Bonds of the Chicago & Alton Railroad Company.

In 1898 the Louisville & Nashville's Unified Four Per Cent. Bonds were selling at from 80 to 90. Wishing to pay off over $7,000,000 of First Consolidated Mortgage Bonds which matured that year, the Louisville & Nashville placed a twenty-year mortgage upon $14,000,000 of these Unified Fours and $4,000,000 of Paducah and Memphis Division bonds, and issued 4 per cent. collateral trust bonds against them. These bonds sold around par. The Louisville & Nashville collateral trust bonds of 1882 were issued for a similar purpose. In this case $10,000,000 of 6 per cent. bonds were issued against $28,163,000 par value of a varied list of bonds, and sold at 90.

Still another purpose of collateral trust bond issues is the reduction of fixed charges. This may be done by converting flexible rentals into fixed interest rates. Thus, in 1900, the Mobile & Ohio purchased the stock of the St. Louis & Cairo, whose line it had leased at a rental amounting to 25 per cent. of $\frac{150}{640}$ of its gross earnings, thus substituting a fixed interest charge for this flexible rental. Or bonds with a low rate of interest may be substituted

for preferred stocks with fixed dividend rates. Thus the $3\frac{1}{2}$ per cent. Guaranteed Trust Certificates of the Pennsylvania Company take the place of the 7 per cent. special stock of the Pittsburgh, Ft. Wayne & Chicago, which dividend is guaranteed by the Pennsylvania Railroad.

Three other purposes of collateral trust issues need only be mentioned. These are: (1) to refund previous issues of bonds; (2) to convert a previous bond issue for the purpose of increasing its authorized amount; and (3) to consolidate and unify the mortgages of railroad companies which enter into consolidation. The usual method of accomplishing each of these purposes is by means of a consolidated or general mortgage. The use of the collateral trust mortgage in this way is very exceptional.

So much for purposes of collateral trust mortgages. We may now consider such important features as the provisions in these mortgages for future needs of the railroad company, their interest rates, their security, and their value as investments.

The first of these may be passed over with the observation that collateral trust mortgages do not usually provide for the future needs of the railroad company issuing them, as is now done in all large mortgages which rest directly upon physical property, and need not do so. In exceptional instances this is done. The Southern Pacific Company's collateral trust mortgage of 1899 provided $28,818,500 for the immediate purchase of the common and preferred stock of the newly reorganized Central Pacific Railroad, and $8,000,000 for the purchase of preferred stock subsequently to be issued. Five million of this additional Central Pacific preferred was issuable at the rate of only $200,000 annually for improvements. Thus this collateral trust mortgage provided for certain betterment needs of the subsidiary Central Pacific Railroad for

a period of twenty-five years to come. But this is exceptional, and its purpose was to insure to the Southern Pacific Company the control of all the Central Pacific stock, the issuance of which was provided for in the latter's plan of reorganization.

Provisions for the remote future are not necessary in collateral trust mortgages to the same extent as in consolidated and other direct mortgages. Only one consolidated or general mortgage can be placed upon a railway system; for, since it rest upon the whole or the greater part of the property of the system, any subsequent mortgage must have an inferior lien. Hence such mortgages must contain provision, not only for the immediate, but also for the more remote future. Collateral trust mortgages represent railway lines which have been constructed under separate charters. Whenever more such lines are needed, a new collateral trust mortgage may be created. The number of such mortgages is limited only by the needs and utility of additional branch lines and connections.

In discussing interest features of these mortgages, we may make two comparisons: (1) we may compare the interest rates of the collateral trust bonds with those of the underlying securities; (2) we may compare the interest rates of the collateral trust bonds with those of other bonds of the same company put out at about the same time.

First, the interest rates of collateral trust bonds compared with those of the underlying securities. Collateral trust notes and bonds which are issued to tide over temporarily unfavorable market conditions for the underlying securities usually bear a higher interest rate than does the collateral and have a much smaller par value. Thus the three Seaboard Air-Line Railway collateral trust issues of 1901, 1902, and 1903, referred to above, bore 5 and 6 per cent. as compared with 4 per cent. on the Seaboard "First Fours," which were their security; and their total

par value was half that of the First Fours deposited under them.

The interest rates on collateral trust bonds issued for other purposes sometimes equal the rate on the underlying collateral, but are usually less. The $25,000,000 of Union Pacific 6 per cent. notes of 1891 were secured by a deposit of over $39,800,000 par value of 5, 6, and 7 per cent. first mortgage bonds, and over $58,500,000 of railway stocks and miscellaneous securities. These notes were issued during financial distress. Usually the excess of interest on the underlying collateral will be used as a sinking fund. The Chicago, Rock Island & Pacific Railway collateral trust 5's of 1884 and following years were secured by an equal amount of 6 per cent. bonds of subsidiary companies constructed under this mortgage. Five-sixths of the interest on the underlying securities paid the interest on the collateral trust bonds, the remaining one-sixth was to be invested in the collateral trust bonds themselves.

This difference between the interest rates on bonds and their collateral cannot be considered a saving to the company in such cases, because it was never contemplated that the underlying securities should be sold. The interest rates on this collateral were purposely made higher to create a sinking fund. In certain cases, however, collateral trust bonds have been created for the express purpose of saving in interest charges, by converting bonds with higher rates, or by converting the rentals on leased lines into low interest payments.

The second and more important consideration is, How do the interest rates on these collateral trust issues compare with the interest rates of other bond issues of the same company put out at about the same time? The nominal interest rates on collateral trust bonds have been about the same as those of other bond issues. They were 6 and 7 per cent. about 1880, 5 per cent. in the later '80's,

and are tending downward toward 3½ per cent. But of two bond issues put forth by the same company at about the same time, one being collateral trust, the other having a direct first lien upon railway property, the direct lien will usually command the higher price. Thus the 3½ per cent. collateral trust bonds of the New York Central, issued in 1898, were worth from 93 to 99 in 1900, and those issued in 1900 were worth from 94 to 98, while the 3½ per cent. Refunding Mortgage Bonds of 1897 were worth from 108 to 111. The Erie 4 per cent. collateral trust bonds of 1901 sold at from 92½ to 96½, while at the same time the 4 per cent. Prior Lien Bonds of 1895 were selling at from 95½ to 101. The Chicago, Rock Island & Pacific Railway 4 per cent. collateral trust bonds of 1902 sold at 98 for those maturing in 1904, and at from 82 to 95 for those maturing in 1918, while at the same time the 4 per cent. General Mortgage 100-year Bonds of 1898 sold at from 99 to 108.

An explanation of this unfavorable view of the collateral trust bond is found in its security as compared with the security of direct mortgages upon property. The test whereby to judge this is the comparative treatment received by collateral trust and other issues in times of corporate insolvency and reorganization. But this gives varying testimony. The Philadelphia & Reading collateral trust bonds of 1892 were undisturbed in the subsequent reorganization, and were eventually converted into the new "General Mortgage Fours." In this case the income from the underlying collateral was more than sufficient to pay the 5 per cent. interest on the bonds. In the voluntary reorganization of the Atchison in 1889, the collateral trust issues of 1880, 1881, and 1887, each, with one exception, received 100 per cent. in new 4 per cent. consolidated mortgage bonds, besides bonuses of from 20 to 56 per cent. in new 5 per cent. income bonds. The one exception, a 4½ per cent. issue, received 85 per cent. in new 4 per cent.

mortgage bonds, and 22 per cent. in new incomes. Several of the old 7 per cent. first mortgages received only 100 per cent. in the new Consols and 60 per cent. in new incomes, while the 5 per cent. first mortgages received only 85 per cent. in Consols and 32 per cent. in incomes. This, however, was a voluntary reorganization, and the test of actual insolvency was lacking.

In the reorganization of the Union Pacific in 1896 the collateral trust issues of 1879, 1883, and 1889 were omitted from the reorganization plan, the mortgages under them having been foreclosed separately and the railways represented by them torn from the Union Pacific system, while the principal 6, 7, and 8 per cent. first mortgage bonds of the Union Pacific received 100 per cent. in new 4 per cent. prior lien bonds and 50 per cent. in new preferred stock. The cause of this dismemberment was the difficulty experienced by the Reorganization Committee with the United States Government in regard to the adjustment of its second lien against the property. This difficulty caused a delay of several years; and in the mean time the collateral trust bondholders felt compelled to take independent action in order to save themselves. Eventually, in 1898, these properties were restored to the Union Pacific system. The holders of the 5 per cent. issue of 1883 received $978.89 on account of the principal and matured interest of each bond, while the holders of the 6 per cent. issue of 1879 realized in full upon their principal and interest.

The Wabash, St. Louis & Pacific 6 per cent. collateral trust bonds of 1883 were subsequently converted into a little more than their par value of 6 per cent. Debenture "B" Bonds, the holders paying 2 per cent. in cash upon the face of the debentures received. These bonds later sank to a merely nominal value. The general mortgage bonds of the old Wabash received precisely similar treat-

ment, however. As before stated, the Wabash, St. Louis & Pacific, owing to its policy of rapid expansion by indiscriminately annexing all the loose odds and ends of railway lines in its vicinity, was in a very poor condition not only financially, but physically. The branches which were represented in the collateral trust bonds were very low in earning power. Again, in the reorganization of the old Richmond & West Point Terminal and Richmond & Danville systems in 1894, which resulted in the present Southern Railway Company, the "Terminal" Company's collateral trust 6's of 1887 received 35 per cent. in new 5 per cent. consolidated mortgage bonds and 90 per cent. in 5 per cent. non-cumulative preferred stock, while the collateral trust 5's of 1889 received 70 per cent. in new preferred stock and 30 per cent. in common stock. These old systems were also in very poor condition. The roadbeds were grown up to weeds, the wooden trestles rotten, the rolling stock was antiquated, some of the locomotives being survivors of *ante-bellum* times, while the books showed such assets as "Fire, $47,000," "Bills Receivable, Worthless, $50,000." There was no adequate security to any of those companies' obligations, and all bond issues suffered severely in the reorganization.

Generally speaking, in times of insolvency and reorganization all bond issues stand on their commercial rather than their legal merits. Legal position does count in the case of two or more successive mortgages on identically the same property, and in such cases the reductions of interest or principal are usually borne by the junior bondholders. But in a contest between independent mortgages upon different portions of a railway system—first mortgages upon the main line, various branches, terminals, and equipment, say—the case is different. If the net earnings of the subsidiary company plus the net income which accrues to the parent company from its interchange

of traffic with its subsidiary company are more than sufficient to pay the interest on the latter's bonds, then they are secure, whether they be first or second mortgage bonds; for to allow such mortgages to be foreclosed, and thus dismember the system, would reduce the earning power of the parent organization, and, therefore, its ability to pay interest even on its first mortgage bonds. The same observation applies to terminal and equipment trust bonds. What advantage is it to have a main line, if there are no branches to bring it traffic, no rolling stock to carry this traffic, and no terminals in which to handle it? And, if control of important branch lines be represented by collateral trust bonds, these bonds are perfectly secure. Indeed, they might reasonably come ahead of the first mortgage bonds of the main line if it came to a trial of strength.

If, however, the contributions of a subsidiary company's traffic to the parent company's net earnings, when supplemented by the former's own net earnings, are not sufficient to pay the interest on the subsidiary's company bonds, then these must suffer a reduction of interest or principal, or both. And, if they be represented by the parent company's collateral trust bonds, these must suffer also. Thus a collateral trust issue must stand on its own commercial merits, in a reorganization, the same as issues secured by other types of mortgages. If it represent branches or lines which are essential to the system, its position will be strong. If not, it will be weak.

A weak collateral trust mortgage, however, is more weak than a similar direct mortgage. For, if its collateral consists of mortgage bonds, its own foreclosure is not sufficient to give possession of the physical property; but often many individual underlying mortgages must also be foreclosed. This involves not only great expense, but a long legal delay, during which the physical condition of the property may be deteriorating, so that, when this

property finally comes into the hands of the collateral trust bondholders, its value has been greatly impaired.

If the collateral consists of stock, the value of the bond may be impaired while the system is yet solvent, but perhaps tending toward insolvency through the fact that the parent company may, through its right to vote the subsidiary company's stock, load the latter's property up with mortgages which, of course, come ahead of the stock. In recent collateral trust mortgages, however, attempts are made to avoid this contingency by limiting the parent company's power to place such liens ahead of that of the collateral trust bondholders.

The other contingency—delay—is also avoided in some recent mortgages by empowering the trustee to sell the collateral without foreclosure. The advantage of this provision is illustrated in the case of the Union Pacific 6 per cent. notes of 1891 (which were not secured by mortgage, but merely by an agreement). In the subsequent reorganization these notes received not only their face in cash, but a bonus of 15 per cent. in the preferred stock of the new company as well. Their collateral, however, represented the control of nearly all the smaller branches of the Union Pacific system, and were essential to its success. The recent collateral trust issues of the Rock Island and the New York Central possess the same feature, and this ought to place such issues in better confidence.

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